

Amendments to the CLAIMS:

Without prejudice, this listing of the claims replaces all prior versions and listings of the claims in the present application:

LISTING OF CLAIMS:

1-18. (Canceled).

19. (Currently Amended) A circuit for converting packets ~~arriving at irregular intervals~~ into a an STM signal in SDH, ~~wherein the circuit is used~~ in a transmission device for transmitting the packets, the circuit comprising:

a buffering unit configured to perform a buffering process for the packets arriving at irregular intervals to convert the packets into a plurality of data streams;

a mapping unit configured to map the data streams into an SDH section payload without adding any SDH path overhead ~~for upper layer transmission~~; and

a generating unit configured to generate the STM signal by adding at least one overhead data of the SDH section payload.

20. (Previously Presented) The circuit as claimed in claim 19, wherein the packets are IP packets which are used for realizing a communication by the Internet Protocol.

21-23. (Canceled).

24. (Currently Amended) A circuit for converting an STM signal in SDH transmission into packets to be sent at irregular intervals, ~~wherein the circuit is used~~ in a transmission device for transmitting the packets, the circuit comprising:

a separating unit configured to separate at least one overhead from data of an SDH section payload, in which no SDH path overhead is included, in the STM signal;

a buffering unit configured to perform a buffering process for the data of the SDH section payload to generate data streams; and

an extracting unit configured to extract the packets from the data streams by using at least one data link layer process.

25. (Canceled).

26. (Previously Presented) The transmission device as claimed in claim 24, wherein the packets are IP packets which are used for realizing a communication by the Internet Protocol.

27. (Currently Amended) A transmission device comprising;
a first circuit; and

a second circuit, wherein the first circuit converts first packets ~~arriving at irregular intervals~~ into a first STM signal in SDH, and the second circuits convert[[s]] a second STM signal in SDH, and the second circuits convert[[s]] a second STM signal in SDH into second packets to be sent at irregular intervals[[,]];

wherein the first circuit includes comprising:

a buffering unit configured to perform a first buffering process for the first packets arriving at irregular intervals to convert the first packets into a plurality of first data streams,

a mapping unit configured to map the first data streams into a first SDH section payload without adding any SDH path overhead ~~for upper layer transmission~~,

a generating unit configured to generate a the first STM signal by adding at least one overhead to data of the first SDH section payload[[;]], and

a sending unit configured to send the first STM signal; and

wherein the second circuit includes comprising:

a separating unit configured to separate at least one overhead from data of a second SDH section payload in the second STM signal[[;]],

a second buffering unit configured to perform a second buffering process for the data of the second SDH section payload to generate second data streams[[;]], and

an extracting unit configured to extract the second packets from the second data streams by using at least one data link layer process.

28. (Canceled).

29. (Previously Presented) The transmission device as claimed in claim 27, wherein the packets are IP packets which are used for realizing a communication by the Internet Protocol.

30-31. (Canceled).

32. (Currently Amended) A transmission system comprising:

a plurality of transmission devices, each of which includes ~~comprises~~: a first circuit and a second circuit and a unit for establishing a connection to another transmission device, wherein the first circuit converts first packets ~~arriving at irregular intervals~~ into a first STM signal in SDH, and the second circuits convert[[s]] a second STM signal in SDH into second packets to be sent at irregular intervals,

wherein the first circuit includes ~~including~~:

a buffering unit configured to perform a first buffering process for the first packets arriving at irregular intervals to convert the first packets into a plurality of first data streams[[;]],

a mapping unit configured to map the first data streams into a first SDH section payload without adding any SDH path overhead ~~for upper layer transmission~~,

a generating unit configured to generate a the first STM signal by adding at least one overhead to-data of the first SDH section payload[[;]], and

a sending unit configured to send the first STM signal; and

wherein the second circuit includes ~~including~~:

a separating unit configured to separate at least one overhead from data of a second SDH section payload in the second STM signal[[;]],

a second buffering unit configured to perform a second buffering process of the data of the second SDH section payload to generate second data streams[[;]], and

an extracting unit configured to extract the second packets sent at irregular intervals from the second data streams by using at least one data link layer process; ~~and~~.

33. (Canceled).

34. (Previously Presented) The transmission system as claimed in claim 32, wherein the packets are IP packets which are used for realizing a communication by the Internet Protocol.

35. (Currently Amended) A method for converting packets ~~arriving at irregular intervals~~ into an STM signal in SDH transmission, ~~wherein said method is used~~ in a transmission device for transmitting the packets, the method comprising ~~the steps of:~~

performing a buffering process for the packets arriving at irregular intervals to convert the packets into a plurality of data streams;

mapping the data streams into an SDH section payload without adding any SDH path overhead for upper layer transmission; and

generating the STM signal by adding at least one overhead to data of the SDH section payload.

36. (Currently Amended) A method for converting an STM signal in SDH transmission into packets ~~to be sent at irregular intervals, wherein the method is used~~ in a transmission device for transmitting the packets, the method comprising ~~the steps of:~~

separating at least one overhead from data of an SDH section payload in the STM signal;

performing a buffering process for the data of the SDH section payload to generate data streams; and

extracting the packets sent at irregular intervals from the data streams by using at least one data link layer process.